

IN THE CLAIMS:

1. (Previously Presented) A ceramic-made filter for capturing particulates present in exhaust gas discharged from diesel engines, wherein a ceramic particles layer made of heat-resistant ceramic particles is formed on a filter by coating so as to substantially avoid direct contact between the filter and ash remaining and accumulating after the particulates captured by the filter have been burnt, the heat-resistant ceramic particles having a BET specific surface area of $300 \text{ m}^2/\text{g}$ or less and wherein the heat-resistant ceramic particles have an average particle diameter of 2 to $20 \text{ }\mu\text{m}$.

2. (Original) A ceramic-made filter according to Claim 1, wherein the BET specific surface area of the heat-resistant ceramic particles is 5 to $100 \text{ m}^2/\text{g}$.

3. (Canceled)

4. (Previously Presented) A ceramic-made filter according to Claim 1, wherein the heat-resistant ceramic particles are made of at least one kind of ceramic material selected from the group consisting of alumina, silica, zirconia, titania, magnesia and a compound oxide thereof.

5. (Original) A ceramic-made filter according to Claim 1, wherein the heat-resistant ceramic particles contain Si in an amount of 10% by weight or less in terms of oxide.

6. (Original) A ceramic-made filter according to Claim 1, wherein the heat-resistant ceramic particles contain an alkali metal in an amount of 1% by weight or less in terms of oxide.

7. (Original) A ceramic-made filter according to Claim 1, which has a honeycomb structure and wherein each cell of the honeycomb structure is sealed at either of the inlet and outlet ends of the honeycomb structure and, at each end of the honeycomb structure, each sealed cell end is surrounded by unsealed cell ends via cell walls.

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8. (Original) A ceramic-made filter according to Claim 1, wherein the ceramic particles layer has a thickness of 2 to 100 μm .

9. (Original) A ceramic-made filter according to Claim 7, wherein the cell walls forming each cell have a thickness of 50 to 500 μm .

10. (Previously Presented) A ceramic-made filter according to Claim 7, wherein the heat-resistance ceramic particles constituting the ceramic particles layer are loaded in an amount of 5 to 250 g/l of honeycomb volume.

11. (Original) A ceramic-made filter according to Claim 7, wherein the honeycomb structure has a cell density of 50 to 500 cells/in.² (7.8 to 78 cells/cm²).

12. (Original) A ceramic-made filter according to Claim 1, which is made of cordierite.

13. (Original) A ceramic-made filter according to Claim 1, wherein a catalyst component is mixed into the ceramic particles layer.

14. (Original) A ceramic-made filter according to Claim 1, wherein a catalyst component is coated on the ceramic particles layer.

15. (Canceled)

16. (Currently Amended) A process for producing a ceramic-made filter, which comprises coating, on the surface of a filter material made of a porous ceramic, a slurry containing at least heat-resistant ceramic particles having (1) a BET specific surface area of 300 m²/g or less and (2) an average particle diameter of 2 to 20 μ m and a binder at proportions satisfying the following formula, to form a ceramic particles layer:

$$\frac{\text{amount of binder solid (calculated as oxide)}}{[\text{weight of heat-resistant ceramic particles} + \text{amount of binder solid (calculated as oxide)}]} \geq 0.02.$$

17. (Previously Presented) A process for producing a ceramic-made filter according to Claim 16, wherein the slurry contains at least heat-resistant ceramic particles having a BET specific surface area of $300 \text{ m}^2/\text{g}$ or less and a binder at proportions satisfying the following formula:

$$0.25 \geq \frac{\text{amount of binder solid (calculated as oxide)}}{[\text{weight of heat-resistant ceramic particles} + \text{amount of binder solid (calculated as oxide)}]} \geq 0.05.$$

18. (Original) A process for producing a ceramic-made filter according to Claim 16, wherein the binder contains an alkali metal in an amount of 5% by weight or less in terms of oxide, relative to the binder solid in terms of oxide.

19. (Previously Presented) In a method of using a ceramic-made filter in a system wherein particulates captured on said filter are burnt and removed by a heater or a catalytic reaction, the improvement comprising using as said ceramic-made filter a ceramic-made filter according to Claim 1.

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20. (Previously Presented) A ceramic-made filter according to Claim 1, wherein the heat resistant ceramic particles and a binder for the ceramic particles satisfy the following formula:

$$0.25 \geq \frac{\text{amount of binder solid (calculated as oxide)}}{[\text{weight of heat-resistant ceramic particles} + \text{amount of binder solid (calculated as oxide)}]}.$$